

CLAIMS

1. A method of producing a two-part layer (2) of a road vehicle tire (4),
5 whereby said layer (2) is produced by co-extruding a first and a second strip (19, 16) through a preforming die (26), through which extends at least one pair (27) of tapered flow channels (25a, 25b) comprising:

offset, side by side inlets (28, 29), said inlets (28, 29) having respective superimposed adjacent lateral portions (30, 32);

10 substantially coplanar outlets (33, 34), said outlets (33, 34) having respective adjacent lateral portions (35, 38) so formed and interconnected as to define, between said two strips (19, 16), an L-shaped joint (20); and

wherein a lateral portion (21) of the second strip (16) has an edge (17) substantially contacting a lateral shoulder (22) of the first strip (19), and is
15 superimposed on a thin annular appendix (23) projecting from the shoulder (22) of the first strip (19).

2. A method as claimed in Claim 1, wherein said layer (2) is a coating skim of a respective sidewall (3) of said tire (4); said first and said second strip
20 (19, 16) being a lateral-wall strip (19) and an abrasion strip (16).

3. A method as claimed in Claim 2, whereby two said coating skims (2) are formed simultaneously; said preforming die (26) having two side by side said pairs (27) of flow channels (25a, 25b); and the two channels (25a, 25b) in each
25 pair (27) being arranged specularly with respect to the two channels (25a, 25b) in the other pair (27).

4. A device for producing a two-part layer (2) of a road vehicle tire (4), the device comprising:

a preforming plate die (26), through which extends at least one pair (27) of tapered flow channels (25a, 25b) for co-extruding a first and second strip (19, 16) respectively;

said two channels (25a, 25b) comprising respective offset, side by side inlets (28, 29), said inlets (28, 29) having respective superimposed adjacent lateral portions (30, 32);

respective substantially coplanar outlets (33, 34), said outlets (33, 34) having respective adjacent lateral portions (35, 38) so formed and interconnected as to define, between said two strips (19, 16), an L-shaped joint (20); and

wherein a lateral portion (21) of the second strip (16) has an edge (17) substantially contacting a lateral shoulder (22) of the first strip (19), and is superimposed on a thin annular appendix (23) projecting from the shoulder (22) of the first strip (19).

5. A device as claimed in Claim 4, wherein said lateral portions (30, 32) of said inlets (28, 29) define, together with the respective said lateral portions (35, 38) of said outlets (33, 34), the opposite ends of respective lateral portions (39, 40) of the respective said channels (25a, 25b); said die (26) comprising a flat supporting plate (41), and, for each said pair (27) of said channels (25a, 25b), a block (47) fitted removably through said plate (41); said lateral portions (39, 40) of said channels (25a, 25b) being formed through said block (47); and said channels (25a, 25b) having the remaining portions defined by respective through slots (55, 56) formed through the supporting plate (41).

6. A device as claimed in Claim 5, wherein said block (47) comprises a first and a second plate (48, 50) superimposed and connected to each other; input portions of said lateral portions (39, 40) of said channels (25a, 25b) being formed through said first plate (48); and output portions of said lateral portions

(39, 40) of said channels (25a, 25b) being formed through said second plate (50).

7. A device as claimed in Claim 6, wherein said supporting plate (41) comprises, for each said block (47), a substantially rectangular cavity (44), which is engaged by said first plate (48) and closed by an end wall (45) through which is formed a substantially rectangular through opening (46) engaged by said second plate (50).

8. A device as claimed in Claim 7, wherein said opening (46) is smaller in height than said cavity (44); said first plate (48) being positioned contacting said end wall (45), and being connected to the end wall (45) by removable fastening means (49).

9. A device as claimed in Claim 4, wherein said layer (2) is a coating skim of a respective sidewall of said tire; said first and said second strip (19, 16) being a lateral-wall strip (19) and an abrasion strip (16).

10. A device as claimed in Claim 9, wherein said lateral portions (30, 32) of said inlets (28, 29) define, together with the respective said lateral portions (35, 38) of said outlets (33, 34), the opposite ends of respective lateral portions (39, 40) of the respective said channels (25a, 25b); said die (26) comprising a flat supporting plate (41), and, for each said pair (27) of said channels (25a, 25b), a block (47) fitted removably through said plate (41); said lateral portions (39, 40) of said channels (25a, 25b) being formed through said block (47); and said channels (25a, 25b) having the remaining portions defined by respective through slots (55, 56) formed through the supporting plate (41).

11. A device as claimed in Claim 10, wherein said block (47) comprises

a first and a second plate (48, 50) superimposed and connected to each other; input portions of said lateral portions (39, 40) of said channels (25a, 25b) being formed through said first plate (48); and output portions of said lateral portions (39, 40) of said channels (25a, 25b) being formed through said second plate (50).

12. A device as claimed in Claim 11, wherein said supporting plate (41) comprises, for each said block (47), a substantially rectangular cavity (44), which is engaged by said first plate (48) and closed by an end wall (45) through which is formed a substantially rectangular through opening (46) engaged by said second plate (50).

13. A device as claimed in Claim 12, wherein said opening (46) is smaller in height than said cavity (44); said first plate (48) being positioned contacting said end wall (45), and being connected to the end wall (45) by removable fastening means (49).

14. A device as claimed in Claim 9, wherein said preforming die (26) has two side by side said pairs (27) of flow channels (25a, 25b); and the two channels (25a, 25b) in each pair (27) being arranged specularly with respect to the two channels (25a, 25b) in the other pair (27).

15. A device as claimed in Claim 14, wherein said lateral portions (30, 32) of said inlets (28, 29) define, together with the respective said lateral portions (35, 38) of said outlets (33, 34), the opposite ends of respective lateral portions (39, 40) of the respective said channels (25a, 25b); said die (26) comprising a flat supporting plate (41), and, for each said pair (27) of said channels (25a, 25b), a block (47) fitted removably through said plate (41); said lateral portions (39, 40) of said channels (25a, 25b) being formed through said block (47); and

said channels (25a, 25b) having the remaining portions defined by respective through slots (55, 56) formed through the supporting plate (41).

16. A device as claimed in Claim 15, wherein said block (47) comprises a first and a second plate (48, 50) superimposed and connected to each other; input portions of said lateral portions (39, 40) of said channels (25a, 25b) being formed through said first plate (48); and output portions of said lateral portions (39, 40) of said channels (25a, 25b) being formed through said second plate (50).

17. A device as claimed in Claim 16, wherein said supporting plate (41) comprises, for each said block (47), a substantially rectangular cavity (44), which is engaged by said first plate (48) and closed by an end wall (45) through which is formed a substantially rectangular through opening (46) engaged by said second plate (50).

18. A device as claimed in Claim 17, wherein said opening (46) is smaller in height than said cavity (44); said first plate (48) being positioned contacting said end wall (45), and being connected to the end wall (45) by removable fastening means (49).

19. A road vehicle tire comprising:
two sidewalls (3), each having an outer coating skim (2) defined by a co-extruded first later-wall strip (19) and second abrasion strip (16);
said second strip (16) comprising a lateral portion (21) having a lateral edge (17);
said first strip (19) having an annular lateral shoulder (22) and a thin annular appendix (23) projecting from the shoulder (22); and
said two strips (19, 16) being connected to each other by an L-shaped

joint (20) wherein said lateral edge (17) is positioned substantially contacting said lateral shoulder (22), and said lateral portion (21) of said second strip (16) is superimposed on said annular appendix (23).

- 5 20. A tire as claimed in Claim 19, wherein said lateral edge (17) and said lateral shoulder (22) are substantially parallel to each other and to an equatorial plane (18) of the tire.